

Dialogical Action Research: A Case Study

Gabriel J. Costello, Galway-Mayo Institute of Technology gabrielj.costello@gmit.ie

Brian Donnellan, National University of Ireland, Maynooth, brian.donnellan@nuim.ie

Action Research (AR) originated from the work of Kurt Lewin during the 1940s and has been summarised as an approach that “combines theory and practice (and researchers and practitioners) through change and reflection in an immediate problematic situation within a mutually acceptable ethical framework” (Avison et al., 1999 p 94). The application of AR has not been without controversy particularly in debates with positivist science on the justification and generation of knowledge. These arguments were addressed by Susman & Evered (1978) in their influential description of AR as consisting of a cyclical process involving five phases: diagnosing, action planning, action taking, evaluating, and specifying learning. The focus of AR is to address real-life problems through intervention together with the research objective of making a contribution to knowledge. Coghlan and Brannick (2005 p 125) emphasise the importance of the social and academic context in which action research is carried out.

Dick (1993) , an academic working in the field of psychology, proposes that the AR methodology has the twofold aim of action and research:

- *action* designed to bring about change in some community, organization or program
- *research* to increase understanding on the part of the researcher or the client, or both – and in many cases some wider community

Reason and Bradbury aim to “draw together some of the main threads that form the diverse practices of action research” and propose an almost lofty vision of AR contributing to the world’s wellbeing and sustainability; in areas ranging from the economic and political to the psychological and spiritual. The following quotation with its emphasis on understanding and reflection is of particular relevance to this study (Reason & Bradbury, 2001 p 2).

So action research is about working towards practical outcomes, and also about creating new forms of understanding, since action without reflection and understanding is blind, just as theory without action is meaningless.

Now a recent addition to the action research portfolio which was tested in this case study will be presented.

Dialogical Action Research

Mårtensson & Lee (2004) have suggested and described a new form of action research called *dialogical* AR. Here is a brief description of their approach.

In dialogical action research, the scientific researcher does not "speak science" or otherwise attempt to teach scientific theory to the real-world practitioner, but instead attempts to speak the language of the practitioner and accepts him as the expert on his organization and its problems.

In their paper Mårtensson & Lee propose that “reflective one-to-one dialogues” between the practitioner and the researcher; that take place at regular intervals in a location removed from the organisation; can help the manager to “reflect on, learn from, and remedy managerial problems in the organization”. In their schema the role of the researcher consists in suggesting actions based on one or more theories taken from their discipline. The implementation of these suggestions is left to the judgment of the practitioner based on his experience, expertise and tacit knowledge together with his reading of the organisational situation that confronts him. Furthermore the ongoing dialogue is presented as an *interface* between the scientific world of the researcher, marked by *theoria* and everyday world of the practitioner which is marked by *praxis*. The overall aim of dialogical AR is to bring about some improvement to the real-world problem of the practitioner while at the same time contributing to the development, confirmation or disconfirmation of theory by the researcher. Mårtensson & Lee draw heavily on Schön’s model of professional inquiry (p.510) consisting of a pattern of five features: situation requiring attention; a surprising response; reflection-in-action; critical examination and restructuring; and an “on-the-spot experiment”. They make a fundamental distinction between traditional forms of consulting and dialogical action research in that the latter always involved reflection and learning. Furthermore action research-unlike consulting- involves someone who has academic expertise rooted in some scientific discipline; where teamwork takes place between researcher and practitioner and where “negative feedback” is seriously taken on board.

It is incumbent on the researcher, according to Mårtensson & Lee (2004 p. 514) to “explicitly and intentionally acquire an understanding of the social and historical context of the organization and its problems”. This was carried out in the first year of the case study undertaken in this work. Mårtensson & Lee take two concepts: the *scientific attitude* and the *natural attitude of everyday life* to form four features which differentiate dialogical AR from existing forms of action research. They are: adopting the scientific attitude; adopting the natural attitude of everyday life; accepting the role played by social and historical context; understanding the role played by social and historical context. As regards the philosophical underpinnings, they classify dialogical AR as viewing reality through social constructionist lens and the phenomenology of Schutz (1962) in Mårtensson & Lee (2004 p 514). In their vision of dialogical AR, the scientist makes suggestions to the practitioner but the practitioner remain the “agent of action” using his or her explicit and tacit knowledge (p. 515). Furthermore they see the role of the researcher having the following attributes in the one-on-one dialogues: firstly to listen in order to identify the problem that requires some action, secondly to gather the facts to form the basis of deciding what suitable theory can be applied to the problem area and thirdly to suggest and monitor appropriate actions to the practitioner. Interestingly for this study they use the analogy of an anthropologist spending a year-long ethnography to understand the world of the natives i.e. the practitioner. Mårtensson & Lee insist on the distinction between the practitioner and the scientific researcher and posit that ultimately it is up to the practitioner to decide on the effectiveness of the action in solving or remedying the problem while it is up to the researcher to decide if the theory been tested is conformed or not. Importantly the authors contend that the *theoria* of the researcher and the *praxis* of the practitioner are “simply different forms of knowledge” and cannot be labelled as better or worse. (p. 517). The dialogical action research process is presented in figure 1.

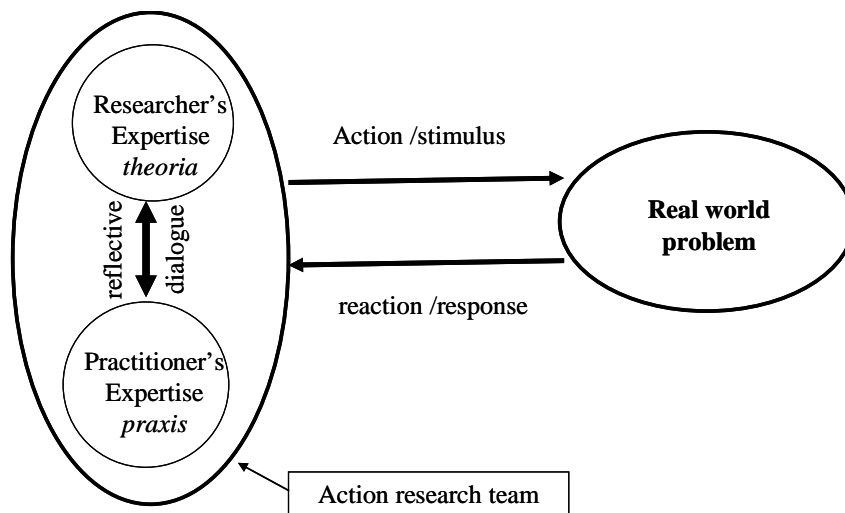


Fig. 1: dialogical action research -adapted from Mårtensson & Lee (2004)

In order to evaluate dialogical AR they suggest three criteria (p. 519):

- The practitioner considers the real world problem to be solved or remedied satisfactorily
- There had been an improvement in the practitioner's expertise
- There has been an improvement in the researcher's expertise

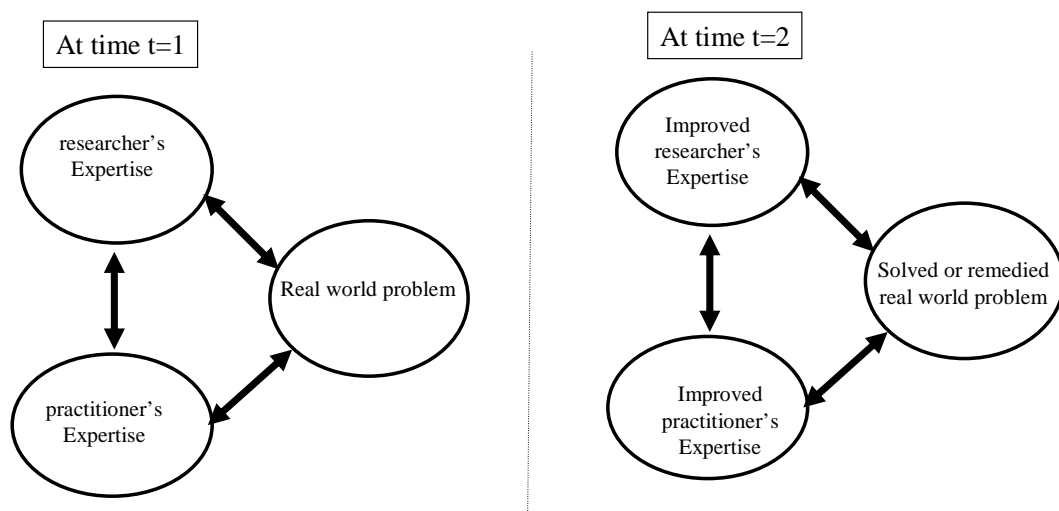


Fig. 2: Improvements over time -adapted from Mårtensson & Lee (2004)

Case Study

The case study was based in APC Ireland, a subsidiary of the American Power Conversion (APC) Corporation. The Corporation entered a major period of transition in the first quarter of 2007 with completion of its acquisition by Schneider Electric. APC designs, manufactures and markets back-up products and services that protect hardware and data from power disturbances. The explosive growth of the Internet has resulted in the company broadening its product offerings from uninterruptible power supplies (UPS) to the high-end InfraStruXureTM architecture in order to meet the critical availability requirements of internet service providers (ISP) and data-centres. The first author was given the status of a temporary employee with company badge, company email and access to the company's intranet. There was agreement in January 2007 to move forward using dialogical Action Research with meetings every two weeks for one year's duration. The meetings during this phase resulted in over 20 hours of recorded interactions translating into almost 60,000 words of transcripts. In particular, the discipline of having to take regular timeout in a "time-pressured" manufacturing environment was a major incentive for the Plant Manager to agree to this approach. Furthermore, in order to address the subject of rigour we adopted the five principles proposed by Davison *et al.* (2004) to evaluate the research: the Principle of the Researcher-Client Agreement (RCA), the Principle of the Cyclical Process Model (CPM), the Principle of Theory, the Principle of Change through Action, and the Principle of Learning through Reflection.

References

- Avison, D. E., Lau, F., Myers, M. D. and Nielsen, P. A. (1999) Action research. *Communications of the ACM* 42 (1),
- Coghlan, D. and Brannick, T. (2005) *Doing Action Research in Your Own Organization*. Sage Publications, London.
- Davison, R. M., Martinsons, M. G. and Kock, N. (2004) Principles of canonical action research. *Information Systems Journal* 14 (1), 43-63.
- Dick, B. (1993) You want to do an action research thesis? Available on line at <http://www.scu.edu.au/schools/gcm/ar/art/arthesis.html> accessed April 2008. *Action Research Resources, Southern Cross University, Australia*.
- Mårtensson, P. and Lee, A. S. (2004) Dialogical Action Research At Omega Corporation. *MIS Quarterly* 28 (3), 507-536.
- Reason, P. and Bradbury, H. (2001) Introduction: Inquiry and Participation in Search of a World Worthy of Human Aspiration. In *Handbook of Action Research: Participative Inquiry and Practice* (Reason, P. and Bradbury, H., Eds), Thousand Oaks, London.
- Susman, G. I. and Evered, R. D. (1978) An Assessment of the Scientific Merits of Action Research. *Administrative Science Quarterly* 23 (4), 582.

Prof. Brian Donnellan

Brian Donnellan is Professor of Information Systems Innovation at the National University of Ireland Maynooth (www.nuim.ie) and Co-Director of the Innovation Value Institute (www.ivi.ie). Prof. Donnellan's teaching and research interests are concerned with how information systems can be used to support innovation, sustainability and technology management. Prior to joining NUI Maynooth, Prof. Donnellan was a faculty member in the Cairnes Business School, National University of Ireland, Galway. He has spent 20 years working in the ICT industry. While in industry he was responsible for the provision of information systems to support New Product Development. Prof. Donnellan is an expert evaluator for the European Commission and has been guest editor and associate editor of several leading Information Systems journals including Journal of IT, Journal of Strategic Information Systems and MIS Quarterly.

Dr. Gabriel Costello

Gabriel J. Costello is a Lecturer in Engineering at the Galway-Mayo Institute of Technology (www.gmit.ie). Prior to this he worked for twenty years in the telecommunications industry where he held engineering, new product introduction and product line management positions. He completed a PhD in Management Information Systems at the J.E. Cairnes School of Business & Economics, National University of Ireland, Galway. Research interests include: Innovative Enterprises and Systems, Speech-enabled self-service IT systems, and using IS to support RUE (Rational use of Energy) in organisations. His publications include: *Journal of Information Technology*, *International Federation for Information Processing (IFIP)*, *European Conference on Information Systems*, and *European Academy of Management Conference*.